



**CORE-V™**



**OPENHW™**



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**TALES**  
Building a future we can all trust

# Demo Table

T [@openhwgroup](https://twitter.com/openhwgroup)

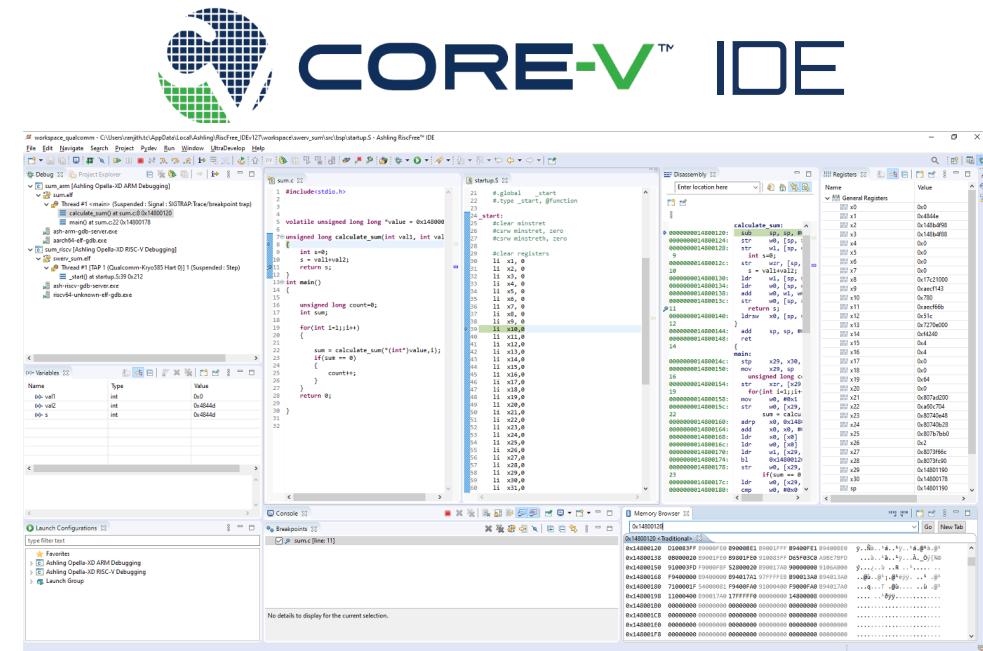
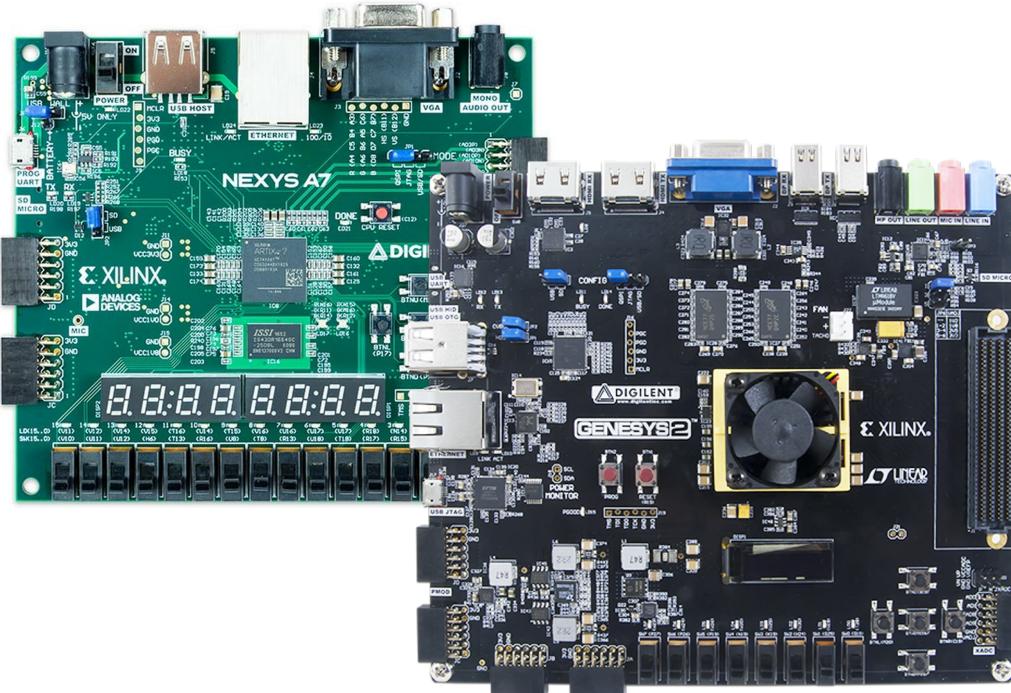
[www.openhwgroup.org](http://www.openhwgroup.org)



# CORE-V™ CVE4 & CVA6 Emulation



- CORE-V projects leverage Digilent NexysA7 & Genesys2 FPGA boards for soft-core bring up for both CVE4 and CVA6 Families



# CV32A6 RISC-V application core

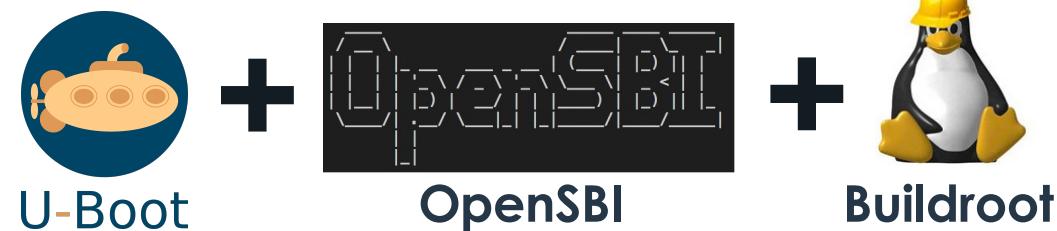
## CV32A6 application core implemented on a Kintex 7 FPGA

- Genesys 2 board



## Linux running on the CV32A6

- State-of-the-art boot flow



## Remote debug using the Eclipse IDE

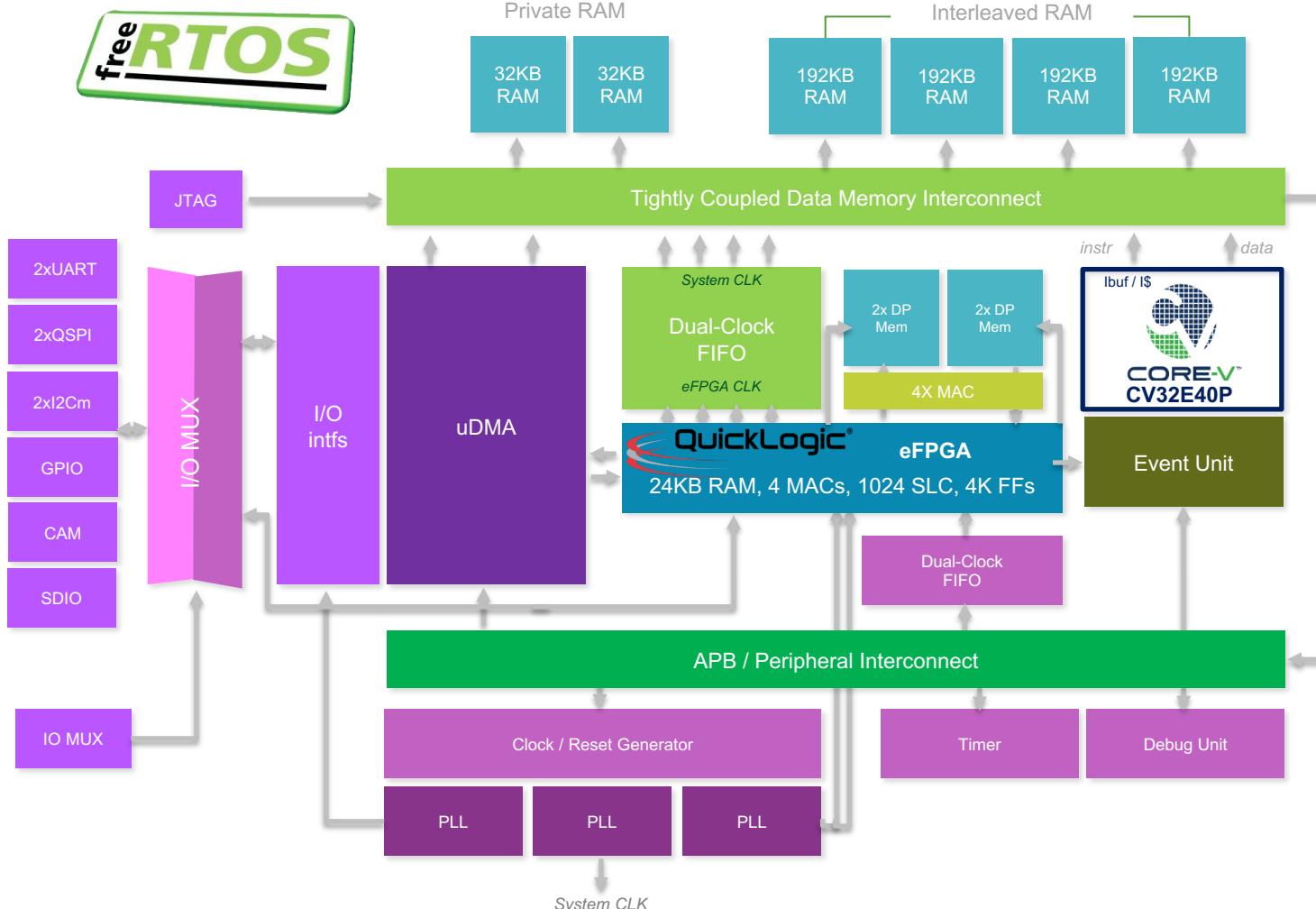
- Via Ethernet



Full open source stack from software to hardware



# CORE-V™ MCU Nexys HW Emulation



- Real Time Operating System (e.g. FreeRTOS) capable ~600+MHz CV32E4 MCU
- Embedded FPGA fabric from QuickLogic
- Multiple low power peripheral interfaces (SPI, GPIO, I2C, HyperRAM, CAMIF, etc) for interfacing with sensors, displays, and connectivity modules
- Tapeout 2° half 2020 in 22FDX

